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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/541,091	06/29/2005	Roger Griffiths	21.1065	4255

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EXAMINER	
VU, MINDY D	

ART UNIT	PAPER NUMBER
2884	

MAIL DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/541,091	GRIFFITHS ET AL.	
	Examiner	Art Unit	
	Mindy Vu	2884	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-11 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1,2 and 4-11 is/are rejected.

7)☒ Claim(s) 3 is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 6/29/05.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

This Office Action is in response to Applicant's application filed June 29, 2005.

National Stage Application

The Examiner has considered the international preliminary examination report (IPER).

Information Disclosure Statement

1. The information disclosure statement filed June 29, 2005 fails to comply with the provisions of 37 CFR 1.97, 1.98 and MPEP § 609 because: each U.S. patent must be identified by inventor, patent number, and issue date; each U.S. patent application publication must be identified by applicant, patent application publication number, and publication date; each foreign patent or published foreign patent application must be identified by the country or patent office which issued the patent or published the application, an appropriate document number, and the publication date indicated on the patent or published application. It has been placed in the application file, but the information referred to therein has not been considered as to the merits. Applicant is advised that the date of any re-submission of any item of information contained in this information disclosure statement or the submission of any missing element(s) will be the date of submission for purposes of determining compliance with the requirements based on the time of filing the statement, including all certification requirements for statements under 37 CFR 1.97(e). See MPEP § 609.05(a).

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-2, 6-9 and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Roscoe et al. (US 5,086,224, hereafter Roscoe).

4. With respect to independent Claim 1, Roscoe discloses a method for downhole spectroscopy processing (Abstract) comprising: obtaining raw spectroscopy data using a downhole tool (Col. 2 lines 42-44); processing downhole the raw spectroscopy data using the downhole tool (pulse height analyzer 36) to obtain a downhole processed solution (Col. 4 lines 43-53); transmitting the downhole processed solution to a surface processing system (Col. 5 lines 4-9); and using the surface processing system to determine lithology information from the downhole processed solution (Col. 6 lines 35-52) wherein processing the raw spectroscopy data comprises: pre-processing downhole the raw spectroscopy data to obtain a net capture spectra; and performing spectral stripping using time information and the net capture spectra to determine elemental yields (Col. 5 lines 32-57).

5. With respect to Claim 2, Roscoe discloses wherein processing comprises time-stacking the raw spectroscopy data (Col. 4 lines 47-48).

6. With respect to independent Claim 6, Roscoe discloses a downhole tool 10 (Fig.1) for processing raw spectroscopy data, comprising: at least one detector 24 for detecting the raw spectroscopy data; processing means 36 for processing the raw spectroscopy data to produce a downhole processed solution; and means for transmitting 14 the downhole processed solution to a surface location, wherein the processing means comprises: means for pre-processing the raw spectral data to obtain a net capture spectra; means for performing spectral stripping using time information and the net capture spectra to determine elemental yields (Col. 5 lines 32-57).

7. With respect to Claim 7, Roscoe discloses the processing means comprises means for determining elemental yields (Col. 5 lines 57- Col. 6 lines 24).

8. With respect to Claim 8, Roscoe discloses wherein the processing means comprises means for computing a matrix property (Col. 3 lines 13-17).

9. With respect to Claim 9, Roscoe discloses the processing means further comprises means for determining dry weight elemental concentrations using the elemental yields (Col. 8 lines 16-20).

10. With respect to Claim 11, Roscoe discloses the processing means comprises: a digital signal processor 36; a power supply operatively connected to the digital signal processor (Col. 4 lines 53-58); a local memory 48 operatively connected to the digital signal processor 36; and a processing interface 38 operatively connected to the digital signal processor 36 (Fig. 1).

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

12. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Roscoe et al. (US 5,086,224, hereafter Roscoe).

13. With respect to Claim 4, Roscoe suggests the use of a programmed digital computer (Col. 5 lines 45-50). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to display the lithology information on a user interface since a computer includes a monitor.

14. Claims 5 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roscoe et al. (US 5,086,224, hereafter Roscoe) in view of Flaum (US 4,464,569).

15. With respect to Claims 5 and 10, Roscoe discloses processing the raw spectroscopy data further comprises means for determining dry weight elemental concentrations using the elemental yields (Col. 8 lines 16-20) and computing a matrix property using the dry weight elemental concentrations (Col. 7 lines 1-41). Roscoe discloses a method for determine the characteristics of earth formation surrounding a borehole but omits the various elements in the formation. Flaum discloses a similar method and apparatus for spectroscopic analysis of a geological formation including the determination of clay property (Col. 12 line 1 – Col. 14 line 36 & Figs. 3 & 4). Therefore,

it would have been obvious to one of ordinary skill in the art at the time of the invention was made to determine the dry weight for at least one of the recited group as suggested by Flaum in view of providing the information regarding the lithology of earth formations.

Allowable Subject Matter

16. Claim 3 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

17. The following is a statement of reasons for the indication of allowable subject matter: the prior art does not teach or suggest comparing the downhole processed solution with data obtained from another downhole tool.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mindy Vu whose telephone number is 571-272-8539. The examiner can normally be reached on M-F 9am - 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dave Porta can be reached on 571-272-2444. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

mv

DAVID PORTA
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800